GenCore version 4.5

OM nucleic - nucleic search, using sw model

Run on: April 24, 2002, 02:31:42 ; Search time 180.75 Seconds
(without alignments)
2290.944 Million cell updates/sec

Title: US-09-525-998A-1_COPY_121_603
Perfect score: 483
Sequence: 1 gatagtgtgtgtccccaagg.....gcctaccccagattgagaat 483

Scoring table: IDENTITY_NUC
Gapop 10.0 , Gapext 1.0

Searched: 930621 seqs, 428662619 residues

Total number of hits satisfying chosen parameters: 1861242

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : N_Geneseq_1101.*
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21: /SIDS2/gcgdata/geneseq/geneseqn/NA2000.DAT:*
22: /SIDS2/gcgdata/geneseq/geneseqn/NA2001.DAT:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	% Query Match	Length	DB	ID	Description
1	483	100.0	483	19	AAV41548	Human soluble tumo
2	483	100.0	483	19	AAV19801	Soluble tumour nec
3	483	100.0	483	20	AAV81732	Tumour necrosis in
4	483	100.0	483	22	AAC83945	Human 30 kDa TNF i
5	483	100.0	1301	18	AAT94022	cDNA for TBP(20-19
6	483	100.0	1334	11	AAQ06282	Plasmid Tumour Nec
7	483	100.0	1368	14	AAQ49932	Lambda-derived TNF
8	483	100.0	1368	21	AAA95105	Human TNFPl coding
9	483	100.0	1478	20	AAX58150	CadC-fusion polype
10	483	100.0	2062	13	AAQ20973	TNF-alpha binding
11	483	100.0	2062	13	AAQ24440	Encodes TNF-alpha
12	483	100.0	2088	12	AAQ10883	30kD TNF inhibitor
13	483	100.0	2088	22	AAC83946	Human 30 kDa TNF i
14	483	100.0	2111	12	AAQ10884	Encodes human 55kD
15	483	100.0	2111	20	AAZ09179	Human tumour necro
16	483	100.0	2161	21	AAZ48475	Human tumour necro
17	483	100.0	2175	16	AAQ90513	p55 TNF-R gene. H
18	483	100.0	6889	17	AAT15931	DHFR/intron (WIras
19	483	100.0	9926	18	AAV04431	Vector pcDNA3-IgG1
20	481.4	99.7	2141	11	AAQ06285	Human Tumour Necro
21	481.4	99.7	2176	12	AAQ12215	Type I TNF recepto
22	479.8	99.3	2170	14	AAQ50870	p55 Tumour necrosi
23	478.4	99.0	608	13	AAQ24441	Encodes truncated
24	475	98.3	1147	18	AAT94021	cDNA for TBP(20-19
25	424.4	87.9	1019	18	AAT94007	cDNA for TBP(20-16
26	424.4	87.9	1202	18	AAT94008	cDNA for TBP(20-16
27	415	85.9	1674	21	AAZ50196	MalE fusion plasmi
28	383	79.3	504	13	AAQ24445	Encodes truncated
29	357.2	74.0	474	13	AAQ24442	Encodes truncated
30	312.2	64.6	339	19	AAV19804	Truncated sINFR, s
31	308	63.8	333	19	AAV19805	Truncated sINFR, s
32	304.2	63.0	332	19	AAV19802	Truncated sINFR, s
33	299.2	61.9	5870	21	AAA15044	Nucleotide sequenc
34	297.4	61.6	2173	11	AAQ06284	Rat Tumour Necrosi
35	294.6	61.0	315	19	AAV19806	Truncated sINFR, s
36	273.8	56.7	294	19	AAV19808	Truncated sINFR, s
37	264.6	54.8	285	19	AAV19807	Truncated sINFR, s
38	258	53.4	1497	21	AAZ50194	MalE fusion plasmi
39	257.8	53.4	477	13	AAQ24444	Encodes truncated
40	250.8	51.9	1464	21	AAZ50195	MalE fusion plasmi
41	221.8	45.9	462	13	AAQ24443	Encodes truncated
42	152.8	31.6	1358	21	AAA95103	Partial human TNFR
43	132.4	27.4	1027	12	AAQ10878	Partial sequence o
44	132.4	27.4	1027	22	AAC83944	Genomic clone for
45	58	12.0	2254	21	AAA95104	Partial human TNFR

ALIGNMENTS

RESULT 1
AAV41548
ID AAV41548 standard; cDNA; 483 BP.
XX
AC AAV41548;
XX
DT 28-SEP-1998 (first entry)
XX
DE Human soluble tumour necrosis factor receptor type I.
XX
KW Human; tumour necrosis factor; TNF; TNF receptor type I;
KW inflammatory disease; leukaemia; TNF binding protein;
KW [illegible]; [illegible]; [illegible]; SS.
XX
OS Homo sapiens.
XX
FH Key Location/Qualifiers
FT CDS 1..483
FT /*tag= a
FT /product= "human soluble TNF receptor type I"
XX
PN WO9824463-A2.
XX
PD 11-JUN-1998.
XX
PF 08-DEC-1997; 97WO-US22743.
XX
PR 09-JUN-1997; 97US-0052023.
PR 06-DEC-1996; 96US-0032587.
PR 23-JAN-1997; 97US-0036355.
PR 07-FEB-1997; 97US-0039315.
XX
PA (AMGE-) AMGEN INC.
XX

```
PI   Bendele AM,  Edwards CK,  Sennello RM;
XX
DR   WPI; 1998-333039/29.
DR   P-PSDB; AAW59664.
XX
PT   Treatment of acute or chronic inflammatory disease, e.g. leukaemia -
PT   by administering tumour necrosis factor binding protein and at least
PT   one additional anti-inflammatory drug, e.g. methotrexate
XX
PS   Disclosure; Fig 1; 104pp; English.
XX
CC   This is the nucleotide sequence of the human tumour necrosis factor
CC   receptor type 1, used in the method of the invention involving the
CC   treatment of acute or chronic inflammatory disease such as leukaemia
CC   by administering tumour necrosis factor binding protein and at least
CC   one additional anti-inflammatory drug, e.g. methotrexate.
XX
SQ   Sequence 483 BP; 130 A; 124 C; 123 G; 106 T; 0 other;


  Query Match             100.0%;  Score 483;  DB 19;  Length 483;
  Best Local Similarity   100.0%;  Pred. No. 3.4e-141;
  Matches  483;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

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Qy      61 aagtgccacaaaggaacctacttgtacaatgactgtccaggccccgggcaggatacggac 120
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Db      61 aagtgccacaaaggaacctacttgtacaatgactgtccaggccccgggcaggatacggac 120

Qy     121 tgcagggagtgtgagagcggctccttcaccgcttcagaaaaccacctcagacactgcctc 180
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Qy     181 agctgctccaaatgccgaaaggaaatgggtcaggtggagatctcttcttgcacagtggac 240
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Db     181 agctgctccaaatgccgaaaggaaatgggtcaggtggagatctcttcttgcacagtggac 240

Qy     241 cgggacaccgtgtgtggctgcaggaagaaccaggtaccggcattattggagtgaaaacctt 300
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Db     241 cgggacaccgtgtgtggctgcaggaagaaccaggtaccggcattattggagtgaaaacctt 300

Qy     301 ttccagtgcttcaattgcagcctctgcctcaatgggaccgtgcacctctcctgccaggag 360
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Db     301 ttccagtgcttcaattgcagcctctgcctcaatgggaccgtgcacctctcctgccaggag 360

Qy     361 aaacagaacaccgtgtgcacctgccatgcaggtttctttctaagagaaaacgagtgtgtc 420
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Db     361 aaacagaacaccgtgtgcacctgccatgcaggtttctttctaagagaaaacgagtgtgtc 420

Qy     421 tcctgtagtaactgtaagaaaaagcctgagtgcacgaagttgtgcctaccccagattgag 480
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Db     421 tcctgtagtaactgtaagaaaaagcctgagtgcacgaagttgtgcctaccccagattgag 480

Qy     481 aat 483
           |||
Db     481 aat 483


RESULT   2
AAV19801
ID   AAV19801 standard; cDNA; 483 BP.
XX
AC   AAV19801;
XX
DT   29-JUN 1998  (first entry)
XX
DE   Soluble tumour necrosis factor receptor coding sequence.
XX
KW   Soluble tumour necrosis factor receptor; sTNFR; TNF mediated disease;
KW   tumour necrosis factor binding protein; autoimmune disease; arthritis;
KW   adult respiratory distress syndrome; cachexia/anorexia; cancer; therapy;
KW   chronic fatigue syndrome; graft rejection; Alzheimer's disease; TNBP; ss.
XX
OS   Homo sapiens.
XX
PN   WO9801555-A2.
XX
PD   15-JAN-1998.
XX
PF   09-JUL-1997;   97WO-US12244.
XX
PR   04-MAR-1997;   97US-0039792.
PR   09-JUL-1996;   96US-0021443.
PR   06-DEC-1996;   96US-0032534.
PR   23-JAN-1997;   97US-0037737.
PR   07-FEB-1997;   97US-0039314.
XX
PA   (AMGE-) AMGEN INC.
XX
PI   Edwards CK,  Fisher EF,  Kieft GL;
XX
DR   WPI; 1998-101052/09.
DR   P-PSDB; AAW52267.
XX
PT   Truncated and soluble forms of tumour necrosis factor receptor -
PT   useful for treating diseases involving factor, e.g. arthritis and
PT   adult respiratory distress syndrome
XX
PS   Claim 1; Fig 1; 205pp; English.
XX
CC   This sequence encodes human soluble tumour necrosis factor receptor
CC   (sTNFR). The protein was used to make the truncated sTNFR proteins of the
CC   invention. The truncated sTNFR proteins and tumour necrosis factor
CC   binding proteins (TNBP) are used to treat any TNF-mediated disease,
CC   e.g. arthritis, adult respiratory distress syndrome, cachexia/anorexia,
CC   cancer, chronic fatigue syndrome, graft rejection, Alzheimer's disease
CC   and other autoimmune diseases. Cells transformed with a vector containing
CC   DNA encoding the protein may be used for production of recombinant sTNFR,
CC   which may also be used for measuring the amount of sTNFR in samples and
CC   to raise antibodies against sTNFR. TNBP may also be used in preparation
CC   of therapeutic compositions for treating the above diseases. The sTNFR
CC   proteins are well suited to large scale production (since they lack the
CC   deamidation site in region 111-126, so are more stable in vivo), contain
CC   fewer disulphide bonds and fewer epitopes, making them less antigenic
CC   than full-length proteins.
XX
SQ   Sequence 483 BP; 130 A; 124 C; 123 G; 106 T; 0 other;


  Query Match             100.0%;  Score 483;  DB 19;  Length 483;
  Best Local Similarity   100.0%;  Pred. No. 3.4e-141;
  Matches  483;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

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Qy      61 aagtgccacaaaggaacctacttgtacaatgactgtccaggccccgggcaggatacggac 120
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Db      61 aagtgccacaaaggaacctacttgtacaatgactgtccaggccccgggcaggatacggac 120

Qy     121 tgcagggagtgtgagagcggctccttcaccgcttcagaaaaccacctcagacactgcctc 180
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     121 tgcagggagtgtgagagcggctccttcaccgcttcagaaaaccacctcagacactgcctc 180

Qy     181 agctgctccaaatgccgaaaggaaatgggtcaggtggagatctcttcttgcacagtggac 240
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Db     181 agctgctccaaatgccgaaaggaaatgggtcaggtggagatctcttcttgcacagtggac 240

Qy     241 cgggacaccgtgtgtggctgcaggaagaaccaggtaccggcattattggagtgaaaacctt 300
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     241 cgggacaccgtgtgtggctgcaggaagaaccaggtaccggcattattggagtgaaaacctt 300
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```
Qy     301 ttccagtgcttcaattgcagcctctgcctcaatgggaccgtgcaccctctcctgccaggag 360
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Db     301 ttccagtgcttcaattgcagcctctgcctcaatgggaccgtgcaccctcctgccaggag 360

Qy     361 aaacagaaacaccgtgtgcacctgccatgcaggtttctttctaagagaaaacgagtgtgtc 420
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Qy     421 tcctgtaqtaactgtaaqaaaaagcctqqaqtqcacgaaqttgtgcctaccccagattgaag 480
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Db     421 tcctgtaqtaactgtaaqaaaaagcctqqaqtqcacgaaqttgtgcctaccccagattgaag 480

Qy     481 aat 483
           |||
Db     481 aat 483


RESULT   3
AAV81732
ID   AAV81732 standard; cDNA; 483 BP.
XX
AC   AAV81732;
XX
DT   04-MAR-1999  (first entry)
XX
DE   Tumour necrosis inhibiter 30 kDa encoding cDNA.
XX
KW   Tumour necrosis factor receptor 1, TNFR-1; inhibitor  osteoprotegerin;
KW   OPG; chimeric; fusion; dimerisation domain; autoimmune disease;
KW   inflammation; apoptosis; ss.
XX
OS   Homo sapiens.
XX
FH   Key             Location/Qualifiers
FT   CDS             1..483
FT                   /*tag= a
FT                   /note= "no stop codon given"
XX
PN   WO9849305-A1.
XX
PD   05-NOV-1998.
XX
PF   29-APR-1998;   98WO-US08631.
XX
PR   01-MAY-1997;   97US-0850188.
XX
PA   (AMGE-) AMGEN INC.
XX
PI   Boyle WJ,  Wooden S;
XX
DR   WPI; 1999-034661/03
DR   P-PSDB; AAW89233.
XX
PT   New chimeric osteoprotegerin polypeptides - contain the
PT   osteoprotegerin dimerisation domain fused to a heterologous sequence,
PT   useful to treat INF and TNFR mediated disorders
XX
PS   Disclosure; Fig 2; 92pp; English.
XX
CC   The present invention describes a chimeric polypeptide (A1), comprising
CC   an osteoprotegerin (OPG) dimerisation domain fused to a heterologous
CC   amino acid sequence. Also described are, (1) a multimer polypeptide
CC   comprising covalently associated A1 monomers; (2) an isolated nucleic
CC   acid encoding A1, (3) an expression vector comprising the nucleic acid
CC   sequence; and (4) a host cell transformed or transfected with the
CC   expression vector so that the nucleic acid is expressible. The products
CC   from the present invention are useful to treat a variety of disorders
CC   including those related to receptor binding. Compositions comprising
CC   tumour necrosis factor (TNF)/OPG and TNF receptor (TNFR)/OPG chimeras
CC   are used to treat TNF and TNFR-mediated disorders such as inflammation,
CC   autoimmune diseases and disorders related to excessive apoptosis. The
CC   chimeras are also useful for detecting molecules which interact with
CC   fused heterologous sequences to identify potential new receptors and
CC   ligands. The present sequence encodes the TNF inhibiter 30 kDa protein.
XX
SQ   Sequence 483 BP; 130 A; 124 C; 123 G; 106 T; 0 other;


  Query Match             100.0%;  Score 483;  DB 20;  Length 483;
  Best Local Similarity   100.0%;  Pred. No. 3.4e-141;
  Matches  483;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1 gataqtgtgtgtgccccaaqqqaaaatatatgccaccctqaaaataattcqattttqctqtacc 60
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Qy      61 aaqtqccacaaaqqaacctactttqtacaatqaactqtccaqqccqqqqqcaqaatacqqac 120
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Qy     121 tgcaqgqaatatqtqaqaqcqgctccttcaccgcttccqaaaaacctcctccqaqcaqtqcctc 180
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Qy     181 agctqctccaaatqccqaaaqqaaatqaqctqataaaatcattcttqcaqcaatqaaac 240
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Db     181 agctqctccaaatqccqaaaqqaaatqaqctqataaaatcattcttqcaqcaatqaaac 240

Qy     241 cgggaaqtcqtqtatqqctgtqaqtaaqaacqaqtaccqtqaccqtattattqqcqttqaaqcctt 300
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Db     241 cgggaaqtcqtqtatqqctgtqaqtaaqaacqaqtaccqtqaccqtattattqqcqttqaaqcctt 300

Qy     301 ttccagtgcttcaattgcagcctctgcctcaatgggaccgtgcaccctcctgccaggag 360
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Db     301 ttccagtgcttcaattgcagcctctgcctcaatgggaccgtgcaccctcctgccaggag 360

Qy     361 aaacagaaacaccgtgtgcacctgccatgcaggtttctttctaagagaaaacgagtgtgtc 420
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     361 aaacagaaacaccgtgtgcacctgccatgcaggtttctttctaagagaaaacgagtgtgtc 420

Qy     421 tcctgtaqtaactgtaaqaaaaagcctqqaqtqcacgaaqttgtgcctaccccagattgaag 480
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Db     421 tcctgtaqtaactgtaaqaaaaagcctqqaqtqcacgaaqttgtgcctaccccagattgaag 480

Qy     481 aat 483
           |||
Db     481 aat 483


RESULT   4
AAC83945
ID   AAC83945 standard; DNA; 483 BP.
XX
AC   AAC83945;
XX
DT   02-MAR-2001  (first entry)
XX
DE   Human 30 kDa TNF inhibitor coding sequence #1.
XX
KW   TNF inhibitor; antiinflammatory; Tumour Necrosis Factor; interleukin;
KW   IL-1; inflammatory disease; degenerative disease; human; ss.
XX
OS   Homo sapiens.
XX
PN   US6143866-A.
XX
PD   07-NOV-2000.
XX
PF   19-JAN-1995;   95US-0375242.
XX
PR   19-JUL-1990;   90US-0555274.
PR   09-JUL-1993;   93US-0090366.
PR   18-JUL-1989;   89US-0381080.
PR   11-DEC-1989;   89US-0450329.
PR   07-FEB-1990;   90US-0479661.
XX
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PA   (AMGE-) AMGEN INC.
XX
PI   Squires C,  King MW,  Hale KK,  Brewer MT,  Thompson RC;
PI   Vanderslice RW,  Vannice J,  Kohno T;
XX
DR   WPI; 2001-006443/01.
DR   P-PSDB; AAB37676.
XX
PT   Novel 30 kDa tumor necrosis factor inhibitor analog comprising a
PT   non-native cysteine residue cross-linked with polyethylene glycol,
PT   useful for treating inflammatory and degenerative diseases mediated by
PT   TNF -
XX
PS   Example 6; Fig 20; 82pp; English.
XX
CC   The present invention relates to Tumour Necrosis Factor (TNF) inhibitors
CC   (see AAB37676 and AAB37685), which have TNF inhibitory activity. The
CC   novel TNF inhibitors of the present invention are useful as therapeutic
CC   agents for inhibiting the activity of TNF and interleukin (IL-1), and
CC   for treating inflammatory and degenerative diseases mediated by TNF. The
CC   present sequence is the coding sequence for the 30 kDa TNF inhibitor
CC   The 30 kDa TNF inhibitor can inhibit TNF alpha.
XX
SQ   Sequence 483 BP; 130 A; 124 C; 123 G; 106 T; 0 other;


  Query Match           100.0%;  Score 483;  DB 22;  Length 483;
  Best Local Similarity  100.0%;  Pred. No. 3.4e-141;
  Matches  483;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1 gatagtgtgtgtccccaaggaaaatatatccaccctcaaaataattcgatttgctgtacc 60
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Qy     181 agctgctccaaatgccgaaaggaaatgggtcaggtggagatctcttcttgcacagtggac 240
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Qy     241 cgggacaccgtgtgtggctgcaggaagaaccagtaccggcattattggagtgaaaacctt 300
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Qy     301 ttccagtgcttcaattgcagcctctgcctcaatgggaccgtgcacctctcctgccaggag 360
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     301 ttccagtgcttcaattgcagcctctgcctcaatgggaccgtgcacctctcctgccaggag 360

Qy     361 aaacagaacaccgtgtgcacctgccatgcaggtttctttctaagagaaaacgagtgtgtc 420
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     361 aaacagaacaccgtgtgcacctgccatgcaggtttctttctaagagaaaacgagtgtgtc 420

Qy     421 tcctgtagtaactgtaaggaaaagcctggagtgcacgaagttgtgcctaccccagattgag 480
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     421 tcctgtagtaactgtaaggaaaagcctggagtgcacgaagttgtgcctaccccagattgag 480

Qy     481 aat 483
           |||
Db     481 aat 483


RESULT   5
AAT94022
ID   AAT94022 standard; cDNA; 1301 BP.
XX
AC   AAT94022;
XX
```

```
DT   19-MAR-1998  (first entry)
XX
DE   cDNA for TBP(20-190)/hCG-beta fusion protein.
XX
KW   Fusion protein; thrombopoietin; TPO; human chorionic gonadotrophin;
KW   beta subunit; hCG-beta; ss.
XX
OS   Homo sapiens.
XX
FH   Key             Location/Qualifiers
FT   CDS             279..1289
FT                   /*tag= a
XX
PN   WO9730161-A1.
XX
PD   21-AUG-1997.
XX
PF   20-FEB-1997;   97WO-US02315.
XX
PR   20-FEB-1996;   96US-0011936.
XX
PA   (ISTF ) ARS APPLIED RES SYSTEMS HOLDING NV.
XX
PI   Campbell RK,  Chappel SC,  Jameson BA;
XX
DR   WPI; 1997-425036/39.
DR   P-PSDB; AAW33360.
XX
PT   Hybrid dimeric protein comprising two co-expressed units - each
PT   based on receptor or ligand and a subunit of a heterodimeric
PT   hormone, especially FSH, for inducing follicular maturation
XX
PS   Example; Pages 39-40, 60pp, English.
XX
CC   A novel fusion protein comprises 2 dimer forming co-expressed amino
CC   acid sequences, each consisting of a homodimeric or heterodimeric
CC   receptor chain or ligand, with ligand-receptor binding activity,
CC   bound directly or via a peptide linker to a subunit of a
CC   heterodimeric protein hormone capable of forming a heterodimer with
CC   the hormone's other subunits. The fusion protein, e.g. the
CC   thrombopoietin (TPO)/human chorionic gonadotrophin beta subunit
CC   (hCG-beta) fusion protein encoded by the present sequence,
CC   significantly increases the biological activity of the hormone
CC   component, reducing the requirement for hormone itself and the
CC   number of injections needed.
XX
SQ   Sequence 1301 BP; 269 A; 413 C; 351 G; 268 T; 0 other;


  Query Match           100.0%;  Score 483;  DB 18;  Length 1301;
  Best Local Similarity  100.0%;  Pred. No. 5.3e-141;
  Matches  483;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1 gatagtgtgtgtccccaaggaaaatatatccaccctcaaaataattcgatttgctgtacc 60
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     345 gatagtgtgtgtccccaaggaaaatatatccaccctcaaaataattcgatttgctgtacc 404

Qy      61 aagtgccacaaaggaacctacttgtacaatgactgtccaggcccgggqcaggatacggac 120
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     405 aagtgccacaaaggaacctacttgtacaatgactgtccaggcccgggqcaggatacggac 464

Qy     121 tgcagggagtgtgagagcggctcttcaccgcttcagaaaaccacctcagacactgcctc 180
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     465 tgcagggagtgtgagagcggctcttcaccgcttcagaaaaccacctcagacactgcctc 524

Qy     181 agctgctccaaatgccgaaaggaaatgggtcaggtggagatctcttcttgcacagtggac 240
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     525 agctgctccaaatgccgaaaggaaatgggtcaggtggagatctcttcttgcacagtggac 584

Qy     241 cgggacaccgtgtgtggctgcaggaagaaccagtaccggcattattggagtgaaaacctt 300
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     585 cgggacaccgtgtgtggctgcaggaagaaccagtaccggcattattggagtgaaaacctt 644
```

```
Qy     301 ttccagtgcttcaattgcagcctctgcctcaatgggaccgtgcacctctcctgccaggag 360
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     645 ttccagtgcttcaattgcagcctctgcctcaatgggaccgtgcacctctcctgccaggag 704

Qy     361 aaacagaacaccgtgtgcacctgccatgcaggtttctttctaagagaaaacgagtgtgtc 420
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     705 aaacagaacaccgtgtgcacctgccatgcaggtttctttctaagagaaaacgagtgtgtc 764

Qy     421 tcctgtaqtaactgtaaqaaaaqcctqqagtgcacgaagttgtgcctaccccagattgag 480
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     765 tcctgtagtaactgtaagaaaagcctggagtgcacgaagttgtgcctaccccagattgag 824

Qy     481 aat 483
           |||
Db     825 aat 827


RESULT   6
AAQ06282
ID   AAQ06282 standard; DNA; 1334 BP
XX
AC   AAQ06282;
XX
DT   29-JAN-1991  (first entry)
XX
DE   Plasmid Tumour Necrosis Factor-Binding Protein 15 cDNA insert.
XX
KW   Tumour necrosis factor binding protein; TNF-BP; TNF-receptor;
KW   pTNF-BP15; ss.
XX
OS   Homo sapiens.
XX
FH   Key             Location/Qualifiers
FT   CDS             213..1325
FT                   /*tag=  a
FT                   /product=TNF-BP
XX
PN   EP393438-A.
XX
PD   24-OCT-1990.
XX
PF   06-APR-1990;   90EP-0106624.
XX
PR   21-JUN-1989;   89DE-3920282.
PR   21-APR-1989;   89DE-4913101.
XX
PA   (BOEH ) BOEHRINGER INGELHEIMINT.
XX
PI   Hauptmann R,  Himmler A,  Maurer-Fogy I,  Stratowa C;
XX
DR   WPI; 1990-321987/43.
DR   P-PSDB; AAR07449.
XX
PT   DNA encoding TNF binding protein and TNF- receptor - used in
PT   tumour treatment and to understand mechanismsm to TNF action
XX
PS   Disclosure; Fig 1(1-3); 51pp; German.
XX
CC   pTNF-BP15 is one of 30 positives clones in a screened cDNA library
CC   from induced TNF-induced fibrosarcoma cells.  A TNF-BP had been
CC   isolated from the urine of patients with uraemia and probes/primers
CC   were constructed from the determined amino acid sequence.
CC   To produce a vector expressing a soluble form of TNF-binding
CC   protein, this plasmid was cut with XmmI, amplified by PCR and the
CC   amplified DNA cut with BamHI and EcoRI.
CC   The resulting 0.75 kb DNA fragment was inserted into pT7/T3 alpha-19
CC   (BRL) cut with the same enzymes to recover pTNF-BP.  This was cut
CC   with BamHI and EcoRI, and the recovered fragment inserted into
CC   pAD-CMV1 (AAQ06283) to give the required plasmid pADTNF-BP.
CC   See also AAQ06282-Q06285
XX
SQ   Sequence 1334 BP; 299 A; 409 C; 342 G; 284 T; 0 other;
```

```
  Query Match             100.0%;  Score 483;  DB 11;  Length 1334;
  Best Local Similarity   100.0%;  Pred. No. 5.4e-141;
  Matches  483;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1 gatagtgtgtgtccccaaggaaaatatatccaccctcaaaataattcgatttgctgtacc 60
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     333 gatagtgtgtgtccccaaggaaaatatatccaccctcaaaataattcgatttgctgtacc 392

Qy      61 aaqtqccacaaaqgaacctacttgtacaatgactgtccaggccgggggcaggatacggac 120
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     393 aagtgccacaaaggaacctacttgtacaatgactgtccaggccgggggcaggatacggac 452

Qy     121 tgcagggagtgtgagagcggctccttcaccgcttcagaaaacacctcacgacactgcctc 180
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     453 tgcagggagtgtgagagcggctccttcaccgcttcagaaaacacctcacgacactgcctc 512

Qy     181 agctgtgccgaaatgccgagaaggagaatgggtccagatggagatcttcttcttgaacagtggac 240
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     513 agctgtgccgaaatgccgagaaggagaatgggtccagatggagatcttcttcttgaacagtggac 572

Qy     241 cgqqacacccqtqtqtqqctccaqtqaqaaqaccaqtaccqqcattattqqaqtqaaaacctt 300
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     573 cgqgacacccgtgtgtggctgcaggaagaccagtaccggcattattggagtgaaaacctt 632

Qy     301 ttccagtgcttcaattgcagcctctgcctcaatgggaccgtgcacctctcctgccaggag 360
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     633 ttccagtgcttcaattgcagcctctgcctcaatgggaccgtgcacctctcctgccaggag 692

Qy     361 aaacagaacaccgtgtgcacctgccatgcaggtttctttctaagagaaaacgagtgtgtc 420
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     693 aaacagaacaccgtgtgcacctgccatgcaggtttctttctaagagaaaacgagtgtgtc 752

Qy     421 tcctgtaqtaactgtaaqaaaaqcctqqagtgcacgaagttgtgcctaccccagattgag 480
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     753 tcctgtagtaactgtaagaaaagcctggagtgcacgaagttgtgcctaccccagattgag 812

Qy     481 aat 483
           |||
Db     813 aat 815


RESULT   7
AAQ49932
ID   AAQ49932 standard; cDNA to mRNA; 1368 BP.
XX
AC   AAQ49932;
XX
DT   29-APR-1994  (first entry)
XX
DE   Lambda-derived TNF-R cDNA.
XX
KW   Human; tumour necrosis factor receptor; TNF-R; interleukin-1 receptor;
KW   IL 1R; fusion protein; linker; TNF; IL 1, cachexia, cerebral malaria;
KW   rheumatoid arthritis; diabetes, multiple sclerosis, septic shock;
KW   pulmonary fibrosis; silicosis; allograft; xenograft; rejection;
KW   graft verses host disease; sepsis; inflammation; allergy;
KW   autoimmune dysfunction; ss.
XX
OS   Homo sapiens.
OS   Lambda-gt10-7-ctnfbp.
XX
FH   Key             Location/Qualifiers
FT   CDS             1..1366
FT                   /*tag=  a
FT                   /product= hTNF-R
FT   sig_peptide     1..120
FT                   /*tag=  b
FT   mat_peptide     121..1363
FT                   /*tag=  c
XX
PN   WO9319777-A.
XX
```

```
PD   14-OCT-1993.
XX
PF   26-MAR-1993;   93WO-US02938.
XX
PR   30-MAR-1992;   92US-0860710
XX
PA   (IMMV ) IMMUNEX CORP.
XX
PI   Smith CA;
XX
DR   WPI; 1993-336592/42.
DR   P-PSDB; AAR42059.
XX
PT   New fusion protein tumour necrosis factor and human interleukin-1
PT   receptor  useful in therapy, diagnosis and assays of e.g.
PT   rheumatoid arthritis, diabetes, cerebral malaria, sepsis, etc.
XX
PS   Disclosure; Page 57 59; 85pp; English.
XX
CC   The sequences given in AAQ49931-32 encode human tumour necrosis factor
CC   receptor (TNF-R) and the sequences in AAQ49933-34 encode human
CC   interleukin-1 receptor (IL-1R).  These sequences were used in the
CC   production of a fusion protein which conformed to one of the
CC   formulae:
CC        TNF-R-linker-TNF-R-linker-IL-1R
CC        IL-1R-linker-TNF-R-linker-TNF-R or
CC        TNF-R-linker-TNF-R
CC   The linker may comprise 5-100 amino acids selected from Gly, Asp,
CC   Ser, Thr and Ala.  These linkers separate the individual moeities
CC   by such a distance that each component of the fusion protien is
CC   capable of folding into the secondary or tertiary structure required
CC   for its biological activity.  These fusion proteins may be used in
CC   therapy, diagnosis and assays for conditions mediated by TNF or IL-1,
CC   particularly in conditions in which both TNF and IL-1 play a causitive
CC   role.  They may be used to treat cachexia, rheumatoid arthritis,
CC   diabetes, multiple sclerosis, pulmonary fibrosis and silicosis,
CC   cerebral malaria, allograft and xenograft rejection in graft verses
CC   host disease, sepsis, septic shock, inflammation, allergies and
CC   autoimmune dysfunctions.
XX
SQ   Sequence 1368 BP; 292 A; 424 C; 376 G; 276 T; 0 other;


  Query Match             100.0%;  Score 483;  DB 14;  Length 1368;
  Best Local Similarity   100.0%;  Pred. No. 5.4e-141;
  Matches  483;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1 gatagtgtgtgtccccaaggaaaatatatccacctcaaaataattcgatttgctgtacc 60
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     121 gatagtgtgtgtccccaaggaaaatatatccacctcaaaataattcgatttgctgtacc 180

Qy      61 aagtgccacaaaggaacctacttgtacaatgactgtccaggcccgggcaggatacggac 120
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     181 aagtgccacaaaggaacctacttgtacaatgactgtccaggcccgggcaggatacggac 240

Qy     121 tgcaggaggtgtgcgaggcggctcttcagcgcttcagaaaaccacctcagacactgcctc 180
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     241 tgcaggaggtgtgcgaggcggctcttcaccgcttcagaaaaccacctcagacactgcctc 300

Qy     181 agctgctccaaatgccgaaaggaaatgggtcaggtggagatctcttcttgcacagtggac 240
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     301 agctgctccaaatgccgaaaggaaatgggtcaggtggagatctcttcttgcacagtggac 360

Qy     241 cgggacaccgtgtgtggctgcaggaagaaccagtaccggcattattggagtgaaaacctt 300
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     361 cgggacaccgtgtgtggctgcaggaagaaccagtaccggcattattggagtgaaaacctt 420

Qy     301 ttccagtgcttcaattgcagcctctgcctcaatgggaccgtgcacctcctgccaggag 360
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     421 ttccagtgcttcaattgcagcctctgcctcaatgggaccgtgcacctcctgccaggag 480

Qy     361 aaacagaacaccgtgtgcacctgccatgcaggtttctttctaagagaaaacgagtgtgtc 420
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||

Db     481 aaacagaacaccgtgtgcacctgccatgcaggtttctttctaagagaaaacgagtgtgtc 540

Qy     421 tcctgtagtaactgtaaagaaaagcctgcagtgcacgaagttgtgcctacccccagattgag 480
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     541 tcctgtagtaactgtaaagaaaagcctgcagtgcacgaagttgtgcctacccccagattgag 600

Qy     481 aat 483
           |||
Db     601 aat 603


RESULT   8
AAA95105
ID   AAA95105 standard; DNA; 1368 BP.
XX
AC   AAA95105;
XX
DT   12-JAN-2001  (first entry)
XX
DE   Human TNFR1 coding sequence.
XX
KW   TNFR1; tumour necrosis factor receptor; polymorphism; human;
KW   tumour, cancer, apoptosis, bacterial infection; ds.
XX
OS   Homo sapiens.
XX
FH   Key             Location/Qualifiers
FT   CDS             1..1368
FT                   /*tag=  a
FT                   /product= "TNFR1"
FT   exon            1..39
FT                   /*tag=  b
FT                   /number= 1
FT   variation       replace(36,G)
FT                   /*tag=  c
FT   exon            40..193
FT                   /*tag=  d
FT                   /number= 2
FT   exon            194..322
FT                   /*tag=  e
FT                   /number= 3
FT   variation       replace(224,T)
FT                   /*tag=  f
FT   variation       replace(269,T)
FT                   /*tag=  g
FT   exon            323..472
FT                   /*tag=  h
FT                   /number= 4
FT   variation       replace(362,A)
FT                   /*tag=  i
FT   variation       replace(403,C)
FT                   /*tag=  j
FT   exon            473..551
FT                   /*tag=  k
FT                   /number= 5
FT   exon            552..625
FT                   /*tag=  l
FT                   /number= 6
FT   exon            626..739
FT                   /*tag=  m
FT                   /number= 7
FT   exon            740..768
FT                   /*tag=  n
FT                   /number= 8
FT   exon            769..1057
FT                   /*tag=  o
FT                   /number= 9
FT   exon            1058..1368
FT                   /*tag=  p
FT                   /number= 10
XX
PN   WO200050436-A1.
XX
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PD 31-AUG-2000
XX
PF 23-FEB-2000; 2000WO-US04606.
XX
PR 23-FEB-1999; 99US-0121314.
XX
PA (GENA-) GENAISSANCE PHARM INC.
PA (NAND/) NANDABALAN K.
PA (SCHU/) SCHULZ V P.
PA (STEP/) STEPHENS J C.
PA (CHEW/) CHEW A.
XX
PI Nandabalan K, Schulz VP, Stephens JC, Chew A;
XX
DR WPI; 2000-543909/49.
DR P-PSDB; AAB23446.
XX
PT Polynucleotides comprising polymorphic variants of a reference sequence
PT for tumour necrosis factor receptor 1 (TNFR1), useful for studying the
PT biological function of TNFR1 and identifying drugs targeting the
PT protein for treating disorders -
XX
PS Claim 7; Fig 4; 79pp; English.
XX
CC The present invention relates to polymorphic variants of the tumour
CC necrosis factor receptor 1 (TNFR1) gene. The present sequence is
CC the coding sequence of the TNFR1 gene. The sequence of the whole gene is
CC given in AAA95102, AAA95103 and AAA95104. The polymorphisms were
CC identified by amplifying and sequencing regions of the gene. Twelve
CC polymorphic loci were discovered. Of these twelve polymorphisms, four can
CC cause a change in the TNFR1 protein. The TNFR1 polymorphisms may be
CC useful for studying the biological function of TNFR1 as well as for
CC identifying drugs targeting the protein for treatment of disorders
CC related to its abnormal expression or function such as tumours,
CC apoptosis related disorders and bacterial infection.
XX
SQ Sequence 1368 BP; 292 A; 424 C; 376 G; 276 T; 0 other;

Query Match 100.0%; Score 483; DB 21; Length 1368;
Best Local Similarity 100.0%; Pred. No. 5.4e-141;
Matches 483; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 gatagtgtgtgtccccaaggaaaatatatccacgctcaaaaataattcgatttgctgtacc 60
Db 121 gatagtgtgtgtccccaaggaaaatatatccacgctcaaaataattcgatttgctgtacc 180

Qy 61 aagtgccacaaaggaacctacttgtacaatgactgtccaggccctgggcaggatacggac 120
Db 181 aagtgccacaaaggaacctacttgtacaatgactgtccaggccctgggcaggatacggac 240

Qy 121 tgcagggagtgtgagagcggctcttcaccgcttcagaaaaccacctcagacactgcctc 180
Db 241 tgcagggagtgtgagagcggctcttcaccgcttcagaaaaccacctcagacactgcctc 300

Qy 181 agctgctccaaatgccgaaaggaaatgggtcaggtggagatctcttcttgcacagtggac 240
Db 301 agctgctccaaatgccgaaaggaaatgggtcaggtggagatctcttcttgcacagtggac 360

Qy 241 cgggacaccgtgtgtgcctgcaggaagaaccagtaccggcattattgcaagtgaaaacctt 300
Db 361 cgggacaccgtgtgtgcctgcaggaagaaccagtaccggcattattgcaagtgaaaacctt 420

Qy 301 ttccagtgcttcaattgcagcctctgcctcaatgggaccgtgcacctctcctgccaggag 360
Db 421 ttccagtgcttcaattgcagcctctgcctcaatgggaccgtgcacctctcctgccaggag 480

Qy 361 aaacagaacaccgtgtgcacctgccatgcagggtttctttctaagagaaaacgagtgtgtc 420
Db 481 aaacagaacaccgtgtgcacctgccatgcagggtttctttctaagagaaaacgagtgtgtc 540

Qy 421 tcctgtaqtaactgtaaaaaaaacctgqaqtqcacqaaqttqtqcctaccccaqattqaq 480
Db 541 tcctgtaqtaactgtaaaaaaaacctgqaqtqcacqaaqttqtqcctaccccaqattqaq 600

Qy 481 aat 483
Db 601 aat 603

RESULT 9
AAX58150
ID AAX58150 standard; DNA; 1478 BP.
XX
AC AAX58150;
XX
DT 21-JUL-1999 (first entry)
XX
DE CadC fusion polypeptide coding sequence.
XX
KW CadC; fusion protein; tumour necrosis factor alpha interaction domain;
KW protein-protein interaction; periplasmic domain; transmembrane domain;
KW CadC transcriptional regulatory domain; receptor interaction;
KW ligand identification; orphan receptor; ss.
XX
OS Synthetic.
XX
PN WO9923116-A1.
XX
PD 14-MAY-1999.
XX
PF 03-NOV-1998; 98WO-US23307.
XX
PP 09-SEP-1998; 98US-0149922.
PR 03-NOV-1997; 97US-0064058.
XX
PA (SMAL-) SMALL MOLECULE THERAPEUTICS INC.
XX
PI Hsing W, Menzel R, Taggart PA;
XX
DR WPI; 1999-313305/26.
XX
PT New CadC fusion polypeptide nucleic acid constructs
XX
PS Claim 4; Fig 9a; 123pp; English.
XX
CC This sequence encodes a CadC-fusion polypeptide containing the
CC tumour necrosis factor alpha interaction domain.
CC The invention relates to CadC fusion polypeptide nucleic acid constructs,
CC which are used to transform cells to produce systems for identifying
CC compounds which modulate interactions between protein sequences. The
CC CadC-fusion polypeptides comprise a periplasmic domain, a transmembrane
CC domain and a CadC transcriptional regulatory domain. Cells transformed
CC with nucleic acid encoding the fusion proteins and a cadBA reporter
CC construct can be used for identifying compounds which modulate a specific
CC protein-protein interaction such as modulation of interactions between
CC protein sequences involved in receptor interactions, e.g. dimerisation.
CC Such methods can be used for identifying ligands for orphan receptors.
CC The system is extremely sensitive in that background is low and the
CC magnitude of signal background is quite robust, such that even minor
CC modulations in protein protein interactions are readily detectable.
XX
SQ Sequence 1478 BP; 398 A; 351 C; 346 G; 381 T; 2 other;

Query Match 100.0%; Score 483; DB 23; Length 1478;
Best Local Similarity 100.0%; Pred. No. 5.6e-141;
Matches 483; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 gatagtgtgtgtccccaaggaaaatatatccacgctcaaaataattcgatttgctgtacc 60
Db 941 gatagtgtgtgtccccaaggaaaatatatccacgctcaaaataattcgatttgctgtacc 1000

Qy 61 aagtgccacaaaggaacctacttgtacaatgactgtccaggccctgggcaggatacggac 120
Db 1001 aagtgccacaaaggaacctacttgtacaatgactgtccaggccctgggcaggatacggac 1060

```
Qy     121 tqcaqqqaqtqtqaqaqcqqctcttcaccqcttcaqaaaaccacctcaqacactqcctc 180
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db    1061 tqcaqqqaqtqtqaqaqcqqctcttcaccqcttcaqaaaaccacctcaqacactqcctc 1120

Qy     181 aqctqctccaaatqccqaaaqqaaatqqqtcaqqtqqaqatctcttcttqcacaqtqqac 240
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db    1121 aqctqctccaaatqccqaaaqqaaatqqqtcaqqtqqaqatctcttcttqcacaqtqqac 1180

Qy     241 cqqqacaccqtqtqtqqctqcaqqaaqaaccaqtaccqqcattattqqaqtqaaaaccttt 300
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db    1181 cqqqacaccqtqtqtqqctqcaqqaaqaaccaqtaccqqcattattqqaqtqaaaaccttt 1240

Qy     301 ttccaqtqcttcaattqcaqcctctqcctcaatqqqaccqtqcacctctcctqccaqqaq 360
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db    1241 ttccaqtqcttcaattqcaqcctctqcctcaatqqqaccqtqcacctctcctqccaqqaq 1300

Qy     361 aaacaqaacaccqtqtqcacctqccatqcaqqtttctttctaaqaqaaaacqaqtqtqtc 420
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db    1301 aaacaqaacaccqtqtqcacctqccatqcaqqtttctttctaaqaqaaaacqaqtqtqtc 1360

Qy     421 tcctqtaqtaactqtaaqaaaaqcctqqaqtqcacqaaqttqtqcctaccccaqattqaq 480
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db    1361 tcctqtaqtaactqtaaqaaaaqcctqqaqtqcacqaaqttqtqcctaccccaqattqaq 1420

Qy     481 aat 483
           |||
Db    1421 aat 1423
```

RESULT 10
AAQ20973
ID AAQ20973 standard; DNA; 2062 BP.
XX
AC AAQ20973;
XX
DT 11-MAY-1992 (first entry)
XX
DE TNF-alpha binding protein gene.
XX
KW Tumour necrosis factor alpha; autoimmune diseases; cachectin; ss;
KW extracellular domain.
XX
OS Homo sapiens.
XX
FH Key Location/Qualifiers
FT CDS 155..1522
FT /*tag= a
FT sig_peptide 155..274
FT /*tag= b
FT mat_peptide 275..1522
FT /*tag= c
FT misc_feature 473..532
FT /*tag= d
FT /note= "homologous to probe AAQ20974"
FT misc_feature 242..751
FT /*tag= e
FT /note= "encodes the extracellular domain of human
FT TNF alpha receptor"
XX
PN GB2246569-A.
XX
PD 05-FEB-1992.
XX
PF 15-JUN-1990; 90GB-0013410.
XX
PR 15-JUN-1990; 90GB-0013410.
XX
PA (CHAR-) CHARING CROSS SUNLE.
XX
PI Feldman M, Gray P, Turner M, Brennan F;
XX
DR WPI; 1992-043613/06.
DR P-PSDB; AAR20787.
XX
PT New tumour necrosis factor alpha binding protein and polypeptide
PT useful in treating cachexia, sepsis and auto immune diseases
PT e.g. rheumatoid arthritis
XX
PS Disclosure; Fig 1; 25pp; English.
XX
CC The sequence is that of DNA encoding tumour necrosis factor alpha
CC binding protein which was obtd. from a human placental cDNA library
CC in lambda gt11 using a probe (AAQ20974). The DNA also encodes the
CC extracellular domain of human TNF alpha receptor and as such it is
CC useful for treating diseases where TNF alpha is involved as a
CC causative agent, e.g. cachexia, sepsis and autoimmune diseases,
CC specifically rheumatoid arthritis. See also AAQ20974.
XX
SQ Sequence 2062 BP, 429 A, 616 C, 573 G, 444 T, 0 other;

Query Match 100.0%; Score 483; DB 13; Length 2062;
Best Local Similarity 100.0%; Pred. No. 6.5e-141;
Matches 483, Conservative 0, Mismatches 0, Indels 0; Gaps 0;

```
Qy       1 qataqtqtqtqtccccaaqqaaaatatatccaccctcaaaataattcqatttqctqtacc 60
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     275 qataqtqtqtqtccccaaqqaaaatatatccaccctcaaaataattcqatttqctqtacc 334

Qy      61 aagtgccacaaaggaacctacttgtacaatqactgtccaggcccgggqcaggatacqqac 120
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     335 aagtgccacaaaggaacctacttgtacaatqactgtccaggcccgggqcaggatacqqac 394

Qy     121 tqcaqqqaqtgtgaqaqcqqctccttcaccqcttcaqaaaaccacctcaqacactqcctc 180
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     395 tqcaqqqaqtgtgaqaqcqqctccttcaccqcttcaqaaaaccacctcaqacactqcctc 454

Qy     181 aqctqctccaaatqccqaaaqqaaatqqqtcaqqtqqaqatctcttcttqcacaqtqqac 240
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     455 aqctqctccaaatqccqaaaqqaaatqqqtcaqqtqqaqatctcttcttqcacaqtqqac 514

Qy     241 cqqqacaccqtqtqtqqctqcaqqaaqaaccaqtaccqqcattattqqaqtqaaaaccttt 300
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     515 cqqqacaccqtqtqtqqctqcaqqaaqaaccaqtaccqqcattattqqaqtqaaaaccttt 574

Qy     301 ttccaqtqcttcaattqcaqcctctqcctcaatqqqaccqtqcacctctcctqccaqqaq 360
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     575 ttccaqtqcttcaattqcaqcctctqcctcaatqqqaccqtqcacctctcctqccaqqaq 634

Qy     361 aaacaqaacaccqtqtqcacctqccatqcaqqtttctttctaaqaqaaaacqaqtqtqtc 420
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     635 aaacaqaacaccqtqtqcacctqccatqcaqqtttctttctaaqaqaaaacqaqtqtqtc 694

Qy     421 tcctqtaqtaactqtaaqaaaaqcctqqaqtqcacqaaqttqtqcctaccccaqattqaq 480
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     695 tcctqtaqtaactqtaaqaaaaqcctqqaqtqcacqaaqttqtqcctaccccaqattqaq 754

Qy     481 aat 483
           |||
Db     755 aat 757
```

RESULT 11
AAQ24440
ID AAQ24440 standard; DNA; 2062 BP.
XX
AC AAQ24440;
XX
DT 05-NOV-1992 (first entry)
XX
DE Encodes TNF alpha 55kD receptor.
XX
KW tumour necrosis factor alpha; extracellular binding domain;
KW treatment; pulmonary diseases; septic shock; HIV infection; AIDS;
KW malaria; viral meningitis; graft versus host disease;

```
KW   autoimmune disease; rheumatoid arthritis.
XX
OS   Homo sapiens
XX
FH   Key             Location/Qualifiers
FT   CDS             156..1517
FT                   /*tag= a
FT                   /product= human TNF-alpha
FT   mat_peptide     1265..1267
FT                   /*tag= b
FT                   /note= "3"
FT   mat_peptide     1265..1267
FT                   /*tag= c
FT                   /codon= seq:"IGG", aa:Thr
FT   mat_peptide     1258..1260
FT                   /*tag= d
FT                   /codon= Seq"AAG", aa:Leu
FT   mat_peptide     1433..1435
FT                   /*tag= e
FT                   /codon= Seq:"GAC", aa:Asn
FT   sig_peptide     156..274
FT                   /*tag= f
XX
PN   WO9207076-A.
XX
PD   30-APR-1992.
XX
PF   18-OCT-1991;   91WO-GB01826.
XX
PR   18-OCT-1990;   90GB-0022648.
XX
PA   (CHAR-) CHARING CROSS SUNLEY RES CENT.
XX
PI   Brennan FM,  Feldmann M,  Gray PW,  Turner MJC;
XX
DR   WPI; 1992-167156/20.
DR   P-PSDB; AAR24000.
XX
PT   New polypeptide capable of binding human TNF alpha - comprises
PT   first three cysteine-rich subdomains of TNF alpha receptor for
PT   treating autoimmune disease, septic shock, HIV etc.
XX
PS   Claim 4; Fig 1; 43pp; English.
XX
CC   This sequence encodes human TNF alpha 55kD receptor . A placenta cDNA
CC   library in gt10 was screened with probe AAQ29235. Ten hybridising clones
CC   were plaque purified and cDNA size determined by PAGE against an
CC   Eco RI digested phage DNA. The inserts of two cDNA clones were then
CC   sequenced. The coding region of the majority of the human TNF-alpha
CC   55kD receptor was isolated as an EcoRI fragment encoding 374 amino
CC   acids, and cloned into a mammalian cell expression vector, resulting
CC   in prTNFR. A derivative of the TNF-alpha receptor was produced by
CC   engineering a termination codon just prior to the transmembrane
CC   domain. PCR with primers AAQ29237,8 generated a 300bp
CC   restriction fragment which was cloned into prTNFR, giving pTNFRecd.
CC   DNA sequencing confirmed this contained the designed DNA sequence.
CC   The TNF-alpha receptor expression plasmids were then transfected
CC   into monkey COS-7 cells.
CC   See also AAQ24440-51, AAR24000, AAR24080-84, AAR27585, AAQ29236-8
XX
SQ   Sequence 2062 BP; 429 A; 618 C; 572 G; 443 T; 0 other;


  Query Match             100.0%;  Score 483;  DB 13;  Length 2062;
  Best Local Similarity   100.0%;  Pred. No. 6.5e-141;
  Matches  483;  Conservative    0;  Mismatches    0;  Indels    0,  Gaps    0,

Qy       1 gatagtgtgtgtccccaaggaaaatatatccacccctcaaaataattcgatttgctgtacc 60
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     275 gatagtgtgtgtccccaaggaaaatatatccacccctcaaaataattcgatttgctgtacc 334

Qy      61 aagtgcccacaaaggaaacgtacttgtacaatgacgtgtccaggccccgggcgaggatacggac 120
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||

Db     335 aagtgcccacaaaggaaacgtacttgtacaatgacgtgtccaggccccgggcgaggatacggac 394

Qy     121 tgcaaagccatgcaggaatcgatcatcggcgccgtctccttcagcttcctggtgattgctatc 180
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     395 tgcaaagccatgcaggaatcgatcatcggcgccgtctccttcagcttcctggtgattgctatc 454

Qy     181 agcttgctccaaatgccgaaaggaaaatgggtcaagtgcaatctctttcttgcacagtggac 240
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     455 agcttgctccaaatgccgaaaggaaaatgggtcaagtgcaatctctttcttgcacagtggac 514

Qy     241 cagggacaccatatatgagtgcaggaaaggacaggtagctcagattgttgaatttgaagaaaacctt 300
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     515 cagggacaccgtgtgtggctgcaggaaggaacaagtacccggaattattggaatttgaaaacctt 574

Qy     301 ttccagtatttcaattgcagccttcgcctcgatttgagctgtttctcgtcgccaggag 360
           |||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     575 ttccagtatttcaattgcagccttcgcctcgatttgagctgtttctcgtcgccaggag 634

Qy     361 aaacgaaaacaccgtgtgcacctgccatgcaggtttctttctaagagaaaacgagtgtgtgtc 420
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     635 aaacgaaaacaccgtgtgcacctgccatgcaggtttctttctaagagaaaacgagtgtgtgtc 694

Qy     421 tcctgtaaataactgtaaagaaaaacctgaagtgcaacaaaattatgcctacccacaagattgag 480
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     695 tcctgtaaataactgtaaagaaaaacctgaagtgcaacaaaattatgcctacccacaagattgag 754

Qy     481 aat 483
           |||
Db     755 aat 757


RESULT  12
AAQ10883
ID   AAQ10883 standard; cDNA; 2088 BP.
XX
AC   AAQ10883;
XX
DT   13-MAY-1991  (first entry)
XX
DE   30kD TNF inhibitor precursor gene in lambda-gt10-7ctnilbp.
XX
KW   Tumour necrosis factor; inhibitor; ss.
XX
OS   Homo sapiens.
XX
FH   Key             Location/Qualifiers
FT   CDS             171..1536
FT                   /*tag= a
XX
PN   AU9058976-A.
XX
PD   24-JAN-1991.
XX
PF   16-JUL-1990;   90AU-0058976.
XX
PR   07-FEB-1990;   90US-0476661.
PR   18-JUL-1989;   89US-0381080.
PR   11-DEC-1989;   89US-0450429.
XX
PA   (SYNE-) SYNERGEN INC.
XX
DR   WPI; 1991-073847/11.
DR   P-PSDB; AAR10986.
XX
PT   Tumour necrosis factor inhibitor - for suppression of TNF alpha
PT   and -beta, useful as therapeutic agent.
XX
PS   Disclosure; Fig 21; 142pp; English.
XX
CC   The sequence encodes the entire 30 kD TNF inhibitor. The clone from
CC   which the sequence was obtd. was isolated from a cDNA library
CC   prepd. from RNA from U937 cells treated with PMA/PHA.  The whole
CC   gene can be inserted into expression vectors for prepn. of TNF
```

```
CC   inhibitor for use in the treatment of inflammatory and degenerative
CC   diseases.
CC   See also AAQ10878, AAQ10884 and AAQ10907.
XX
SQ   Sequence 2088 BP; 439 A; 626 C; 578 G; 445 T; 0 other;


  Query Match             100.0%;  Score 483;  DB 12;  Length 2088;
  Best Local Similarity   100.0%;  Pred. No. 6.5e-141;
  Matches  483;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1 gataqtgtgtgtccccaaggaaaatatatccaccctcaaaataattcgatttgctgtacc 60
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Db     289 gataqtgtgtgtccccaaggaaaatatatccaccctcaaaataattcgatttgctgtacc 348

Qy      61 aagtgccacaaaggaacctacttgtacaatgactgtccaggcccgggqcaggatacggac 120
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     349 aagtgccacaaaggaacctacttgtacaatgactgtccaggcccgggqcaggatacggac 408

Qy     121 tgcagggagtgtgagagcggctccttcaccgcttcagaaaaccacctcagacactgcctc 180
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     409 tgcagggagtgtgagagcggctccttcaccgcttcagaaaaccacctcagacactgcctc 468

Qy     181 agctgctccaaatgccgaaaggaaatgggtcaggtggagatctcttcttgcacagtggac 240
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     469 agctgctccaaatgccgaaaggaaatgggtcaggtggagatctcttcttgcacagtggac 528

Qy     241 cgggacaccgtgtgtggctgcaggaagaaccagtaccggcattattggagtgaaaaccttt 300
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     529 cgggacaccgtgtgtggctgcaggaagaaccagtaccggcattattggagtgaaaaccttt 588

Qy     301 ttccagtgcttcaattgcagcctctgcctcaatgggaccgtgcacctctcctgccaggag 360
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     589 ttccagtgcttcaattgcagcctctgcctcaatgggaccgtgcacctctcctgccaggag 648

Qy     361 aaacagaacaccgtgtgcacctgccatgcaggtttctttctaagagaaaacgagtgtgtc 420
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     649 aaacagaacaccgtgtgcacctgccatgcaggtttctttctaagagaaaacgagtgtgtc 708

Qy     421 tcctgtagtaactgtaaagaaaagcctggagtgcacgaagttgtgcctaccccagattgag 480
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     709 tcctgtagtaactgtaaagaaaagcctggagtgcacgaagttgtgcctaccccagattgag 768

Qy     481 aat 483
          |||
Db     769 aat 771


RESULT  13
AAC83946
ID   AAC83946 standard; DNA; 2088 BP.
XX
AC   AAC83946;
XX
DT   02-MAR-2001  (first entry)
XX
DE   Human 30 kDa TNF inhibitor precursor coding sequence.
XX
KW   TNF inhibitor; antiinflammatory, Tumour Necrosis Factor, interleukin,
KW   IL-1; inflammatory disease; degenerative disease; human; ss.
XX
OS   Homo sapiens.
XX
PN   US6143866-A.
XX
PD   07-NOV-2000.
XX
PF   19-JAN-1995;   95US-0375242.
XX
PR   19-JUL-1990;   90US-0555274.
PR   09-JUL-1993;   93US-0090366.
PR   18-JUL-1989;   89US-0381080.
PR   11-DEC-1989;   89US-0450329.
PR   07-FEB-1990;   90US-0479661.
XX
PA   (AMGE-) AMGEN INC.
XX
PI   Squires C,  King MW,  Hale KK,  Brewer MT,  Thompson RC;
PI   Vanderslice RW,  Vannice J,  Kohno T;
XX
DR   WPI; 2001-006443/01.
DR   P-PSDB; AAB37677.
XX
PT   Novel 30 kDa tumor necrosis factor inhibitor analog comprising a
PT   non-native cysteine residue cross-linked with polyethylene glycol,
PT   useful for treating inflammatory and degenerative diseases mediated by
PT   TNF -
XX
PS   Example 6; Fig 21; 82pp; English.
XX
CC   The present invention relates to Tumour Necrosis Factor (TNF) inhibitors
CC   (see AAB37676 and AAB37685), which have TNF inhibitory activity. The
CC   novel TNF inhibitors of the present invention are useful as therapeutic
CC   agents for inhibiting the activity of TNF and interleukin (IL-1), and
CC   for treating inflammatory and degenerative diseases mediated by TNF. The
CC   present sequence is the coding sequence for the precursor of 30 kDa TNF
CC   inhibitor. The 30 kDa TNF inhibitor can inhibit TNF alpha.
XX
SQ   Sequence 2088 BP; 439 A; 626 C; 578 G; 445 T; 0 other;


  Query Match             100.0%;  Score 483;  DB 22;  Length 2088;
  Best Local Similarity   100.0%;  Pred. No. 6.5e-141;
  Matches  483;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1 gataqtgtgtgtccccaaggaaaatatatccaccctcaaaataattcgatttgctgtacc 60
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Db     289 gataqtgtgtgtccccaaggaaaatatatccaccctcaaaataattcgatttgctgtacc 348

Qy      61 aagtgccacaaaggaacctacttgtacaatgactgtccaggcccgggqcaggatacggac 120
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     349 aagtgccacaaaggaacctacttgtacaatgactgtccaggcccgggqcaggatacggac 408

Qy     121 tgcagggagtgtgagagcggctccttcaccgcttcagaaaaccacctcagacactgcctc 180
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     409 tgcagggagtgtgagagcggctccttcaccgcttcagaaaaccacctcagacactgcctc 468

Qy     181 agctgctccaaatgccgaaaggaaatgggtcaggtggagatctcttcttgcacagtggac 240
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     469 agctgctccaaatgccgaaaggaaatgggtcaggtggagatctcttcttgcacagtggac 528

Qy     241 cgggacaccgtgtgtggctgcaggaagaaccagtaccggcattattggagtgaaaaccttt 300
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     529 cgggacaccgtgtgtggctgcaggaagaaccagtaccggcattattggagtgaaaaccttt 588

Qy     301 ttccagtgcttcaattgcagcctctgcctcaatgggaccgtgcacctctcctgccaggag 360
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     589 ttccagtgcttcaattgcagcctctgcctcaatgggaccgtgcacctctcctgccaggag 648

Qy     361 aaacagaacaccgtgtgcacctgccatgcaggtttctttctaagagaaaacgagtgtgtc 420
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     649 aaacagaacaccgtgtgcacctgccatgcaggtttctttctaagagaaaacgagtgtgtc 708

Qy     421 tcctgtagtaactgtaaagaaaagcctggagtgcacgaagttgtgcctaccccagattgag 480
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     709 tcctgtagtaactgtaaagaaaagcctggagtgcacgaagttgtgcctaccccagattgag 768

Qy     481 aat 483
          |||
Db     769 aat 771


RESULT  14
AAQ10955
ID   AAQ10955 standard; cDNA; 2111 BP.
XX
```

```
AC   AAQ10955;
XX
DT   24-MAY-1991  (first entry)
XX
DE   Encodes human 55kD TNF-binding protein.
XX
KW   Tumour Necrosis Factor; binding proteins; septic shock;
KW   autoimmune glomerulonephritis; lymphokine; cytokine.
XX
FH   Key             Location/Qualifiers
FT   sig_peptide     187..273
FT                   /*tag= a
FT   mat_peptide     274..1551
FT                   /*tag= b
FT                   /product= 55kD TNF-BP
XX
PN   EP417563-A.
XX
PD   20-MAR-1991.
XX
PF   31-AUG-1990;    90EP-0116707.
XX
PR   20-APR-1990;    90CH-0001347.
PR   12-SEP-1989;    89CH-0003319.
PR   08-MAR-1990;    90CH-0000746.
XX
PA   (HOFF ) HOFFMANN-LA ROCHE AG.
XX
PI   Brockhaus M, Loetscher H, Lesslauer W;
PI   Schlaeger EJ;
XX
DR   WPI; 1991-081851/12.
DR   P-PSDB; AAR11082.
XX
PT   Insoluble tumour necrosis factor binding proteins and DNA
PT   encoding them, useful in pharmaceutical prods. and for antibody
PT   prodn.
XX
PS   Claim 4; Fig 1; 26pp; German.
XX
CC   Partial amino acid sequences were determined for the 55 and 75kD
CC   TNF-BPs (see AAR11072-R11081) and oligonucleotide primers were
CC   synthesised based on these partial sequences. The primers were used
CC   to produce a cDNA fragment for use as aprobe to screen a human
CC   placental cDNA bank constructed in lambda gt11. Positive clones were
CC   identifed and sequenced. DNA constructs comprising the TNF-BP coding
CC   sequence may also contain a fragment encoding a human Ig domain.
CC   Recombinant constructs are used to transform cells to confer
CC   improved TNF-binding properties.
CC   See also AAQ10956.
XX
SQ   Sequence 2111 BP; 445 A; 628 C; 588 G; 450 T; 0 other;


  Query Match             100.0%;  Score 483;  DB 12;  Length 2111;
  Best Local Similarity   100.0%;  Pred. No. 6.6e-141;
  Matches  483;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1 gataqtqtqtgtccccaaggaaaatatatccaccctcaaaataattcgatttgctgtacc 60
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     307 gataqtqtqtgtccccaaggaaaatatatccaccctcaaaataattcgatttgctgtacc 366

Qy      61 aagtgccacaaaggaacctacttgtacaatgactgtccaggccctgggcaggatacggac 120
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     367 aagtgccacaaaggaacctacttgtacaatgactgtccaggccctgggcaggatacggac 426

Qy     121 tgcaggaagtgtgaggagcggctccttcaccgcttcagaaaaccacctcagacactgcctc 180
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     427 tgcagggagtgtgaggagcggctccttcaccgcttcagaaaaccacctcagacactgcctc 486

Qy     181 agctgctccaaatgccgaaagtgaaatgggtcaggtgtgagatctcttcttgcaccagtgga 240
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     487 agctgctccaaatgccgaaagtgaaatgggtcaggtgtgagatctcttcttgcaccagtgga 546

Qy     241 ttttctatatatatatttatttttta tttatttatttgaaatttaaaaccctt 300
           ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     547 cggaacacctgtatgtgactgcaaaaggaccagtaa tgattattgaattgaaaaccctt 606

Qy     301 ttcaaatacttcaattgaaatctatattaaatgaaa tatatttttttaaaaa 350
           ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     607 ttcaaata ttcaattgaaatcta tcaattttaa ttt a tctttaaaaaq 666

Qy     351 aaacagaaacacctgtgtgcacctgccatgcagatttcttctaaagaaaacgagtgtgtc 420
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Qy     481 aat 483
           |||
Db     787 aat 789


RESULT  15
AAZ09170
ID   AAZ09170 standard; cDNA; 2111 BP.
XX
AC   AAZ09170;
XX
DT   18-OCT-1999  (first entry)
XX
DE   Human tumour necrosis factor binding protein cDNA.
XX
KW   Tumour necrosis factor binding protein; TNF; insoluble protein; agonist;
KW   anti-inflammatory; antimalarial; treatment; septic shock; inflammation;
KW   autoimmune glomerulonephritis; cerebral malaria; immune response;
KW   antagonist, diagnosis; ds.
XX
OS   Homo sapiens.
XX
FH   Key             Location/Qualifiers
FT   CDS             187..1554
FT                   /*tag= a
FT                   /product= "TNF binding protein"
FT   sig_peptide     187..273
FT                   /*tag= b
FT   mat_peptide     274..1551
FT                   /*tag= c
XX
PN   EP939121-A2.
XX
PD   01-SEP-1999.
XX
PF   31-AUG-1990;    90EP-0116707.
XX
PR   20-APR-1990;    90CH-0001347.
PR   12-SEP-1989;    89CH-0003319.
PR   08-MAR-1990;    90CH-0000746.
XX
PA   (HOFF ) HOFFMANN LA ROCHE & CO AG F.
XX
PI   Brockhaus M, Loetscher H, Lesslauer W;
PI   Schlaeger E;
XX
DR   WPI; 1999-480840/41.
DR   P-PSDB; AAY90934.
XX
PT   New insoluble proteins, and fragments, that bind to tumor necrosis
PT   factor, used to treat e.g. septic shock or cerebral malaria
XX
PS   Claim 4; Fig 1; 25pp; German.
XX
CC   This invention describes novel homogeneous insoluble proteins (I),
CC   their (in)soluble fragments (Ia) and their salts that can bind tumour
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CC   necrosis factor (TNF). The products of the invention have
CC   anti-inflammatory and antimalarial activity. (I) and (Ia) are used (i)
CC   to treat diseases in which TNF is involved (e.g. septic shock, autoimmune
CC   glomerulonephritis, cerebral malaria, immune responses and inflammation),
CC   (ii) to purify TNF, (iii) to identify TNF (ant)agonists and (iv) for
CC   diagnostic determination of TNF in body fluids. Antibodies raised against
CC   (I) are used for affinity purification of (I). This sequence encodes
CC   a tumour necrosis factor binding protein described in the method of
CC   the invention.
XX
SQ   Sequence 2111 BP, 445 A, 629 C, 587 G, 450 T, 0 other;


  Query Match             100.0%;  Score 483;  DB 20;  Length 2111;
  Best Local Similarity   100.0%;  Pred. No. 6.6e-141;
  Matches  483;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1 gataqtqtqtqtccccaaqqaaaatatatccaccctcaaaataattcqatttqctqtacc 60
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Qy      61 aaqtqccacaaaqqaacctacttgtacaatqactqtccaqqcccqqqqcaqqatacqqac 120
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Db     367 aaqtqccacaaaqqaacctacttqtacaatqactqtccaqqcccqqqqcaqqatacqqac 426

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Qy     181 aqctqctccaaatqcccaaaaqqaaatqqqtcaqqtqqaqatctcttcttqcacaqtqqac 240
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Qy     361 aaacaqaaacaccqtqtqcacctqccatqcaqqtttctttctaaqaqaaaacqaqtqtqtc 420
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Db     667 aaacaqaaacaccqtqtqcacctqccatqcaqqtttctttctaaqaqaaaacqaqtqtqtc 726

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           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     727 tcctgtaqtaactqtaaqaaaaqcctqqaqtqcacqaaqttgtgcctaccccagattqag 786

Qy     481 aat 483
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Db     787 aat 789


Search completed: April 24, 2002, 03:28:29
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